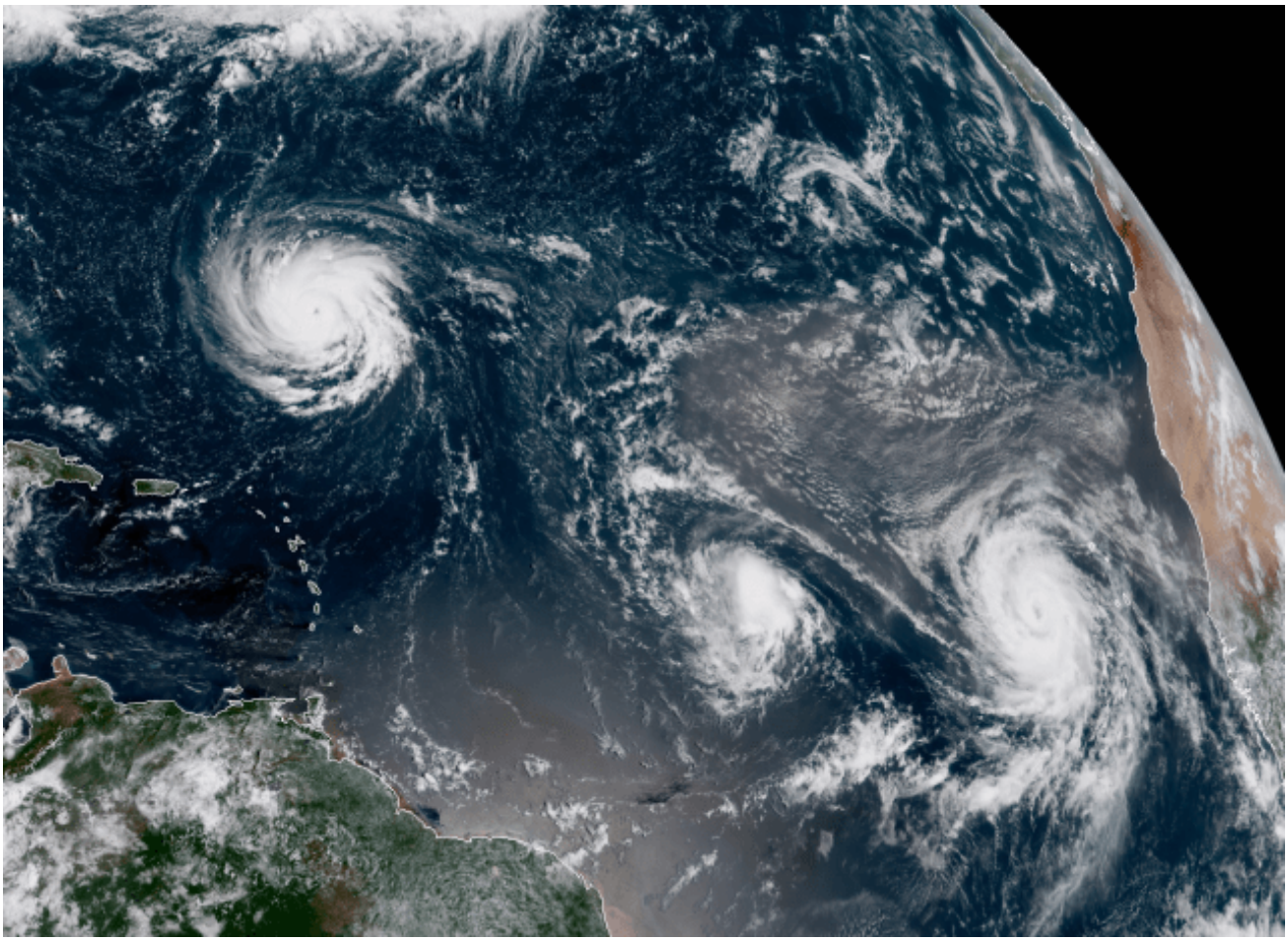
An active September for Tropical Cyclones

Description

September is usually the most active month of the year for tropical cyclones worldwide, but in 2018 there were 21 named tropical cyclones active at some point during the month – just one short of the record of 22 set in 1966.

Atlantic

Despite conditions in the tropical Atlantic and Caribbean not being as favourable for tropical cyclone formation as in 2017, the region still saw a total of seven named storms in September, the strongest of which developed outside of the deep tropics. Florence was the most significant hurricane bringing over 750 mm rain and severe flooding to North Carolina in the USA. Gordon made landfall as a tropical Storm over southern USA and Helene remained in the eastern Atlantic and affected the UK and Republic of Ireland as a ‘post-tropical’ storm. Isaac was a weakening tropical storm as it encountered the unfavourable conditions in the Caribbean, but still brought a spell of heavy rain to some islands as did Kirk a couple of weeks later. The latter produced some severe flooding in Barbados. Joyce meandered near the Azores for a few days and as the month ended Leslie was set to move slowly over central parts of the subtropical Atlantic for several days to come.



Hurricanes Florence and Helene with Tropical Storm Isaac seen at 1345 GMT 10 September 2018 (Credit: RAMMB/CIRA).

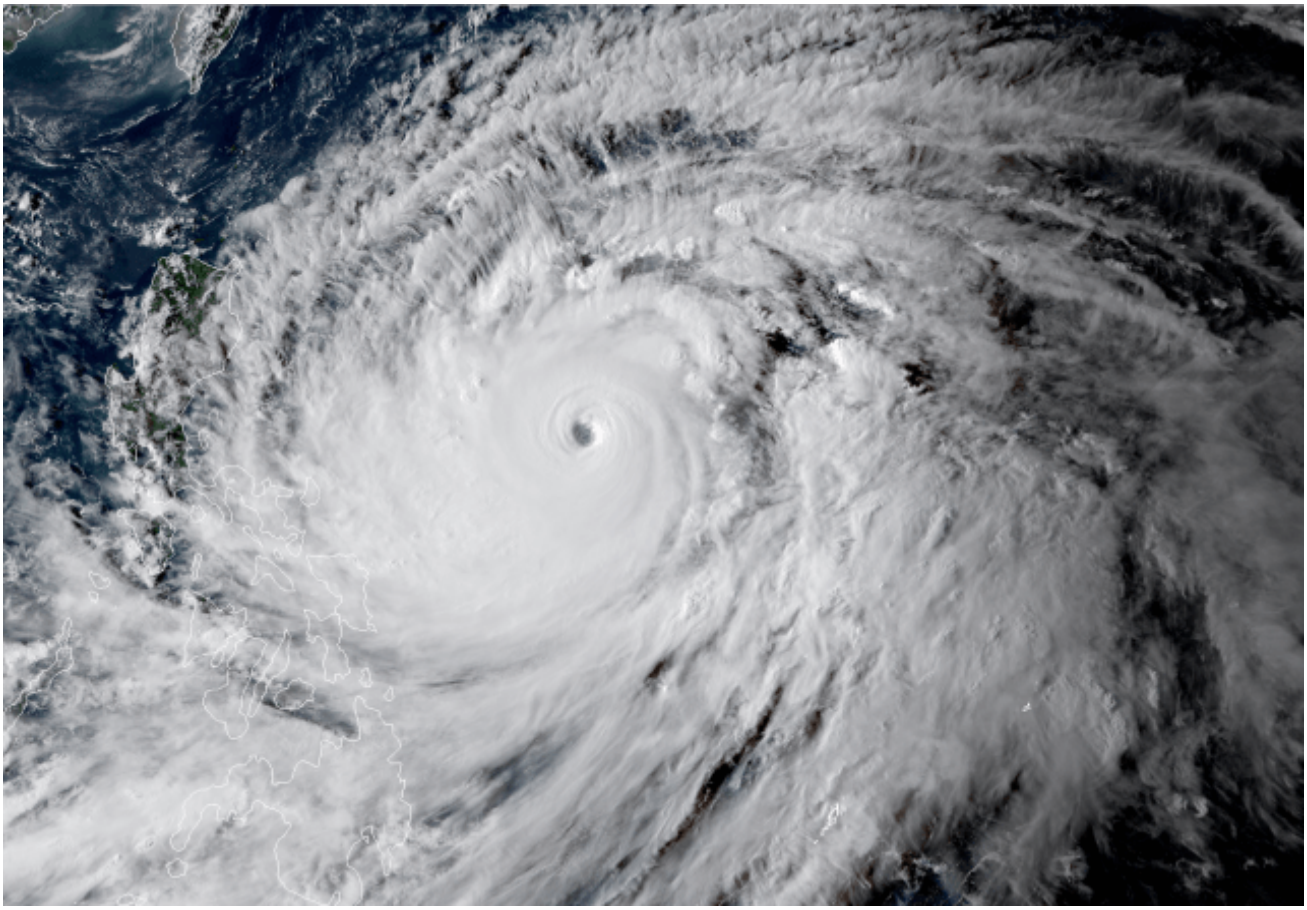
Eastern Pacific

The eastern Pacific hurricane season in 2018 has been very active. In September Hurricanes Miriam and Norman remained far from land, but Olivia brought heavy rain and flooding to parts of Hawaii as it weakened on its journey into the central Pacific. Paul was a weak tropical storm, but as the month ended Tropical Storm Rosa, formerly a hurricane, threatened to bring flash flooding to parts of north-western Mexico, southern California and Arizona after landfall. Tropical Storm Sergio is expected to become a hurricane over open waters during early October.

Western Pacific

The month started with Typhoon Jebi bringing strong winds and rain to parts of Japan. Mangkhut developed soon after and ploughed a track across the northern Philippines as a powerful typhoon causing loss of life and severe damage from wind and flooding. Mangkhut went on to also have severe impacts over Hong Kong. Barijat reached southern China as a weak tropical storm, but the next in line was Trami which became another powerful typhoon. After moving slowly for several days east of Taiwan, it eventually crossed the Ryukyu Islands and into the main islands of Japan at a similar location to Jebi a few weeks before. As the month ended, Typhoon Kong-rey looked set to head

towards Japan or South Korea during the first week of October.

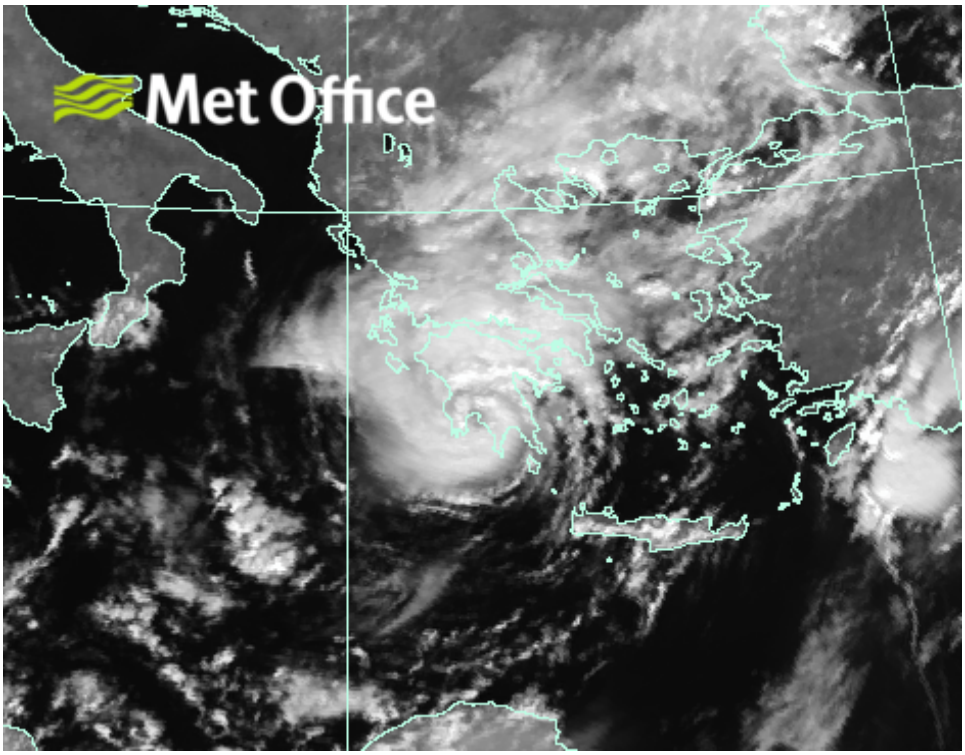


Typhoon Mangkhut seen at 0800 GMT 13 September 2018 (Credit: RAMMB/CIRA).

Elsewhere in the Globe

Walaka became the first storm to be named in the central Pacific region for two years and quickly developed into a hurricane. In the Bay of Bengal a depression strengthened into Tropical Storm Daye just before landfall and brought flooding impacts to parts of India. There was also an unusual September tropical storm in the South Pacific near the Solomon Islands named Liua.

In addition to the named tropical storms described above there were other weaker tropical depressions in the Atlantic, east and west Pacific and the south Indian Ocean. Finally, the Mediterranean saw what is often referred to as a ‘medicane’, which made landfall over Greece as a likely tropical or subtropical storm bringing severe flooding to some regions. Since this was not officially named by any tropical cyclone warning agency, it has not been included in the total of 21 named storms for the month of September.



Mediterranean Storm at 1130 GMT 29 September 2018

Further Information

Follow our Twitter feed @metofficestorms for regular information on tropical cyclones currently active worldwide.

Date Created
October 2018

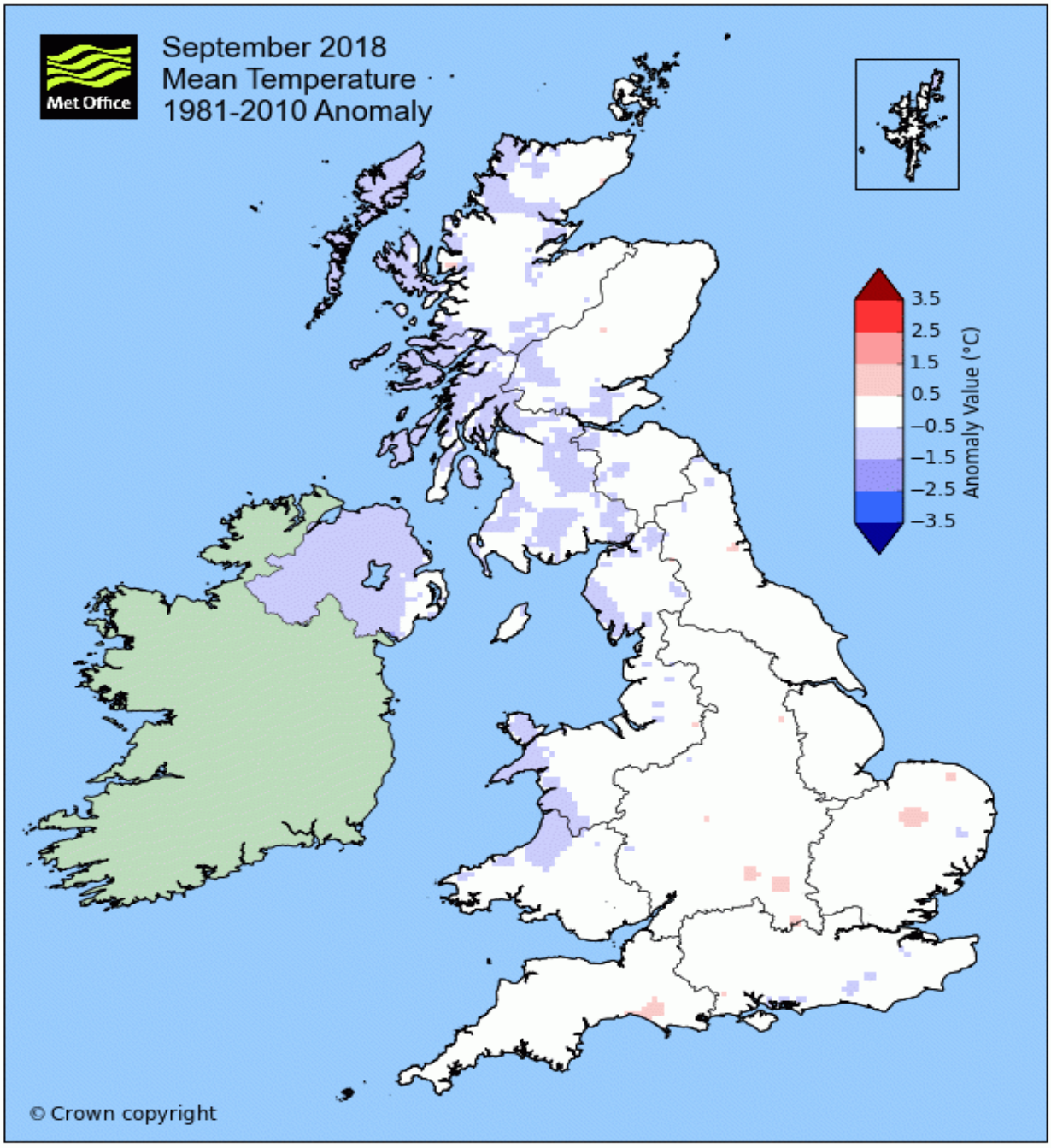
September statistics

Description

Despite seeing the first two named storms of the 2018/19 season, named by the Met Office and Met Éireann, and the remnants of an ex-tropical storm, Storm Helene, September in general was a fairly average month.

Area	Max act	Max anom	Min act	Min anom	Mean act	Mean anom
UK	16.3°C	-0.2°C	8.5°C	-0.4°C	12.4°C	-0.3°C
England	18.1°C	0.3°C	9.2°C	-0.3°C	13.7°C	-0.0°C
Wales	16.1°C	-0.5°C	8.9°C	-0.2°C	12.5°C	-0.4°C
Scotland	13.6°C	-0.6°C	7.2°C	-0.4°C	10.4°C	-0.5°C
N Ireland	15.3°C	-0.7°C	7.9°C	-0.8°C	11.5°C	-0.8°C

The weather was predominantly unsettled, although after Storm Ali and Storm Bronagh, high pressure quickly became established giving a sunny autumnal spell from the 24th, especially over southern areas.



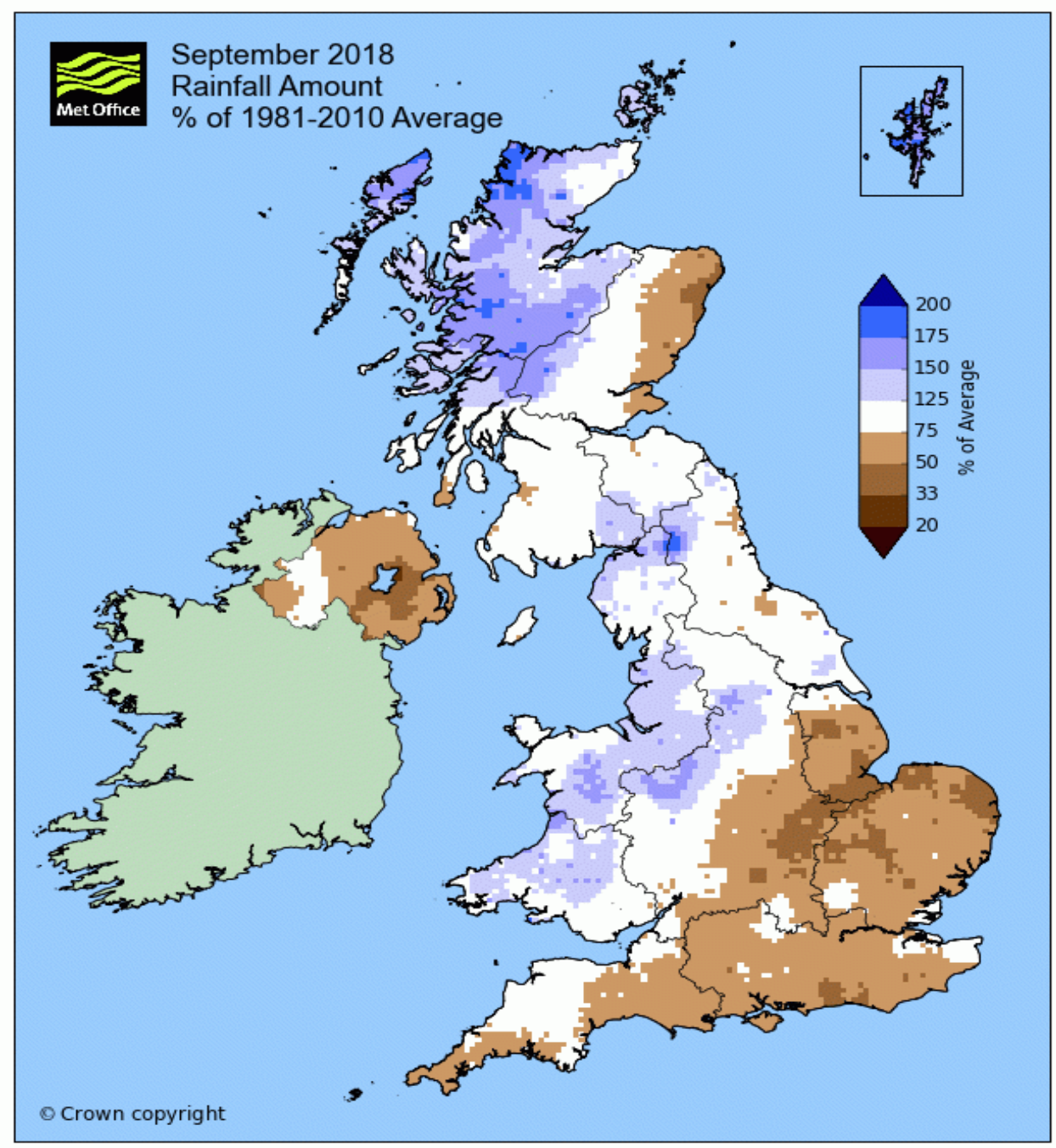
Provisional mean temperatures September 2018

There were some chilly nights, at times, and some early frosts in a few prone locations. The minimum temperature of -3.6C at Katesbridge on Saturday morning 29th is a new regional minimum temperature record for September in Northern Ireland – beating the previous lowest of -3.2 at Magherally, Banbridge (not far away) on the morning of September 30th 1991.

Temperatures have fluctuated, with no particularly warm spells, and are averaging out to near normal for the month as a whole.

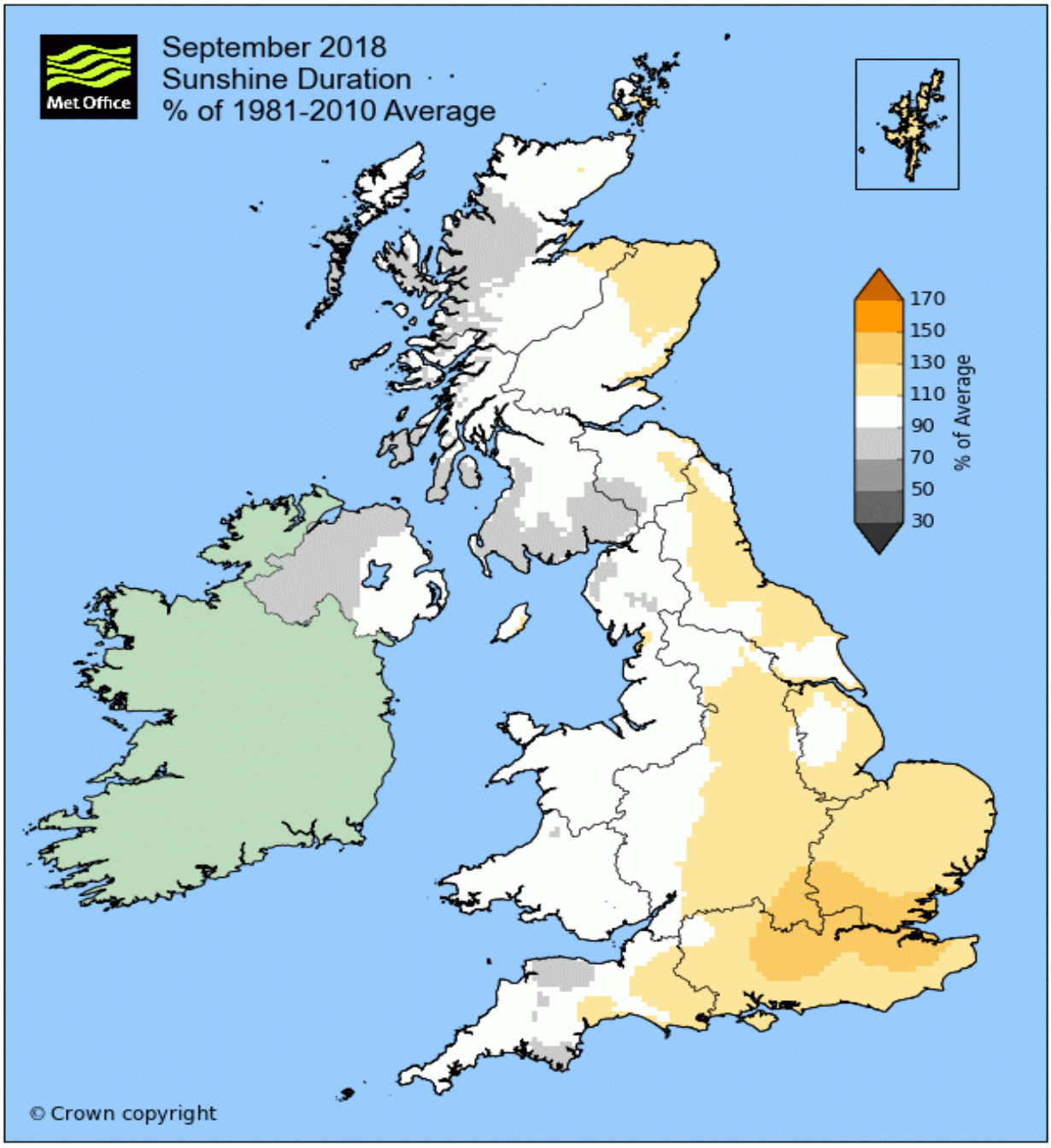
Area	Rainfall act	Rainfall anom	Sun act	Sun anom
UK	103.6mm	107%	135.2hrs	108%
England	59.1mm	85%	158.2hrs	115%
Wales	131.6mm	113%	128.5hrs	101%
Scotland	178.2mm	131%	105.1hrs	100%
N Ireland	56.6mm	62%	98.7hrs	87%

Rainfall has been above average for Wales, north west England and Scotland, but rather drier than average for most of Northern Ireland, Aberdeenshire and Fife, and the south-eastern half of England.



Provisional rainfall statistics for September 2018

Eastern areas have had a reasonably bright month, however it has been slightly duller than average in some places further west with the UK as a whole seeing 108% of the whole month's average.



Provisional sunshine statistics for September 2018

Record-breaking summer

The average September followed on from a record-breaking summer, June, July and August was one of the warmest on record for the UK. June was the third-warmest and July the second-warmest in our official national records dating back to 1910, summer 2018 has provisionally been named joint warmest on record with 2006, 2003 and 1976.

Named Storms

On September 11th the Met Office and Met Éireann revealed the list of storm names for the coming

season. First introduced in 2015, this is the fourth year the Met Office and Met Éireann (the meteorological service in the Irish Republic) have jointly run the 'Name our Storms' scheme, aimed at raising awareness of severe weather before it hits.

We saw the first named storm of the season, Storm Ali, on September 19th. It brought widespread strong winds and heavy rains, with the strongest gusts being recorded in Ireland, Northern Ireland and western Scotland, with gusts up to 91 mph in Northern Ireland, Scotland, northern England and parts of north Wales.

Exposed areas saw even higher gusts with Cairngorm Summit recording 105 mph and the Tay Road Bridge recording a gust of 102 mph.

Storm Bronagh was the second storm, bringing gusts of up to 78 mph to parts of England and Wales. Storm Bronagh was named on 20 September with strong winds forecast particularly for the southern half of the UK. It brought widespread strong winds and heavy rain, with the strongest gusts being recorded across the hills and coasts of England and Wales.

You can keep up to date with the weather using our forecast pages and by following us on Twitter and Facebook, as well as using our new mobile app which is available for iPhone from the App store and for Android from the Google Play store.

Please note that these provisional figures, especially for rainfall and sunshine, are subject to revision. Anomalies are expressed relative to the 1981-2010 averaging period.

Date Created
October 2018